

Software Quality Activity Matrix

Software Development Phases

SQ Activities

	Concept	Requirements	Design	Implementation	Integration & Test (Verification)	Acceptance Test (Validation)	Operations & Maintenance
Reviews	<ul style="list-style-type: none"> Assess System Concept Review (SCR) Review Lessons Learned (LL) 	<ul style="list-style-type: none"> Assess Software Specification Review (SSR) Capture/Review LL 	<ul style="list-style-type: none"> Assess preliminary and critical design reviews (i.e., PDR and CDR) Assess peer reviews Capture/Review LL 	<ul style="list-style-type: none"> Assess peer reviews (e.g., code walkthroughs or inspections) Capture/Review LL 	<ul style="list-style-type: none"> Witness test execution Assess Test Readiness Review (TRR) Capture/Review LL 	<ul style="list-style-type: none"> Witness test execution Assess AR or ORR Assess MOR and FOR Capture/Review LL 	<ul style="list-style-type: none"> Assess software enhancement build reviews Capture/Review LL
Software Deliverables	<ul style="list-style-type: none"> Develop Software Quality (SQ) task and resource allocation forecast Develop SW assurance requirements for SOW/MAR Assess Quality Manual and Quality Management System Assess System Requirements Specification 	<ul style="list-style-type: none"> Assess Software Management Plan (SMP) Assess Software Requirements Spec's (SRSs) and ICD's Assess/Approve SA Plan(s) Assess S/W requirements traceability matrix (SRTM) 	<ul style="list-style-type: none"> Assess Software Design documentation Assess initial development records (e.g., development folders) Assess Test Plans and procedures Assess updates to SRTM and allocation to S/W components and design 	<ul style="list-style-type: none"> Assess code for compliance to standards Assess development records Assess final Test Plans and procedures Assess updates to SRTM Assess preliminary User's Guides 	<ul style="list-style-type: none"> Assess development records Assess Test Reports and test artifacts Assess/verify SRTM Assess final User's Guides 	<ul style="list-style-type: none"> Assess development records Assess Test Reports and test artifacts Assess/verify SRTM Assess ADP/VDDs Assess/Approve Software Maintenance Plan 	<ul style="list-style-type: none"> Assess updated software documentation Review SA Plan(s) to address O&M phase changes
Configuration Management		<ul style="list-style-type: none"> Assess Configuration Management Plan (CMP) Assess CMP compliance Participate in CCB 	<ul style="list-style-type: none"> Assess CMP compliance Participate in CCB 	<ul style="list-style-type: none"> Assess CMP compliance Participate in CCB 	<ul style="list-style-type: none"> Assess CMP compliance Participate in CCB 	<ul style="list-style-type: none"> Assess CMP compliance Assess FCA and PCA artifacts Participate in CCB 	<ul style="list-style-type: none"> Assess CMP compliance Review operational baseline Participate in CCB
Software Problem Reporting (SPR) and Corrective Action (CA)		<ul style="list-style-type: none"> Review and track action items Assess Software Problem Reporting (SPR) system 	<ul style="list-style-type: none"> Review and track action items 	<ul style="list-style-type: none"> Assess, analyze & trend SPRs Review and track action items 	<ul style="list-style-type: none"> Assess, analyze & trend SPRs Review and track action items 	<ul style="list-style-type: none"> Assess, analyze & trend SPRs Review and track action items 	<ul style="list-style-type: none"> Assess, analyze & trend SPRs Review and track action items
Risk Management	<ul style="list-style-type: none"> Assess Project's Continuous Risk Mgmt Approach Assess/Approve Risk Mgmt Plan 	<ul style="list-style-type: none"> Identify, review, and assess software related risks 	<ul style="list-style-type: none"> Identify, review, and assess software related risks 	<ul style="list-style-type: none"> Identify, review, and assess software related risks 	<ul style="list-style-type: none"> Identify, review, and assess software related risks 	<ul style="list-style-type: none"> Identify, review, and assess software related risks 	<ul style="list-style-type: none"> Identify, review, and assess software related risks
IV&V		<ul style="list-style-type: none"> Review IV&V Memorandum Of Agreement (MOA), project plan(s), and technical issues (i.e., TIMs) 	<ul style="list-style-type: none"> Review IV&V monthly reports and TIMs 	<ul style="list-style-type: none"> Review IV&V monthly reports and TIMs 	<ul style="list-style-type: none"> Review IV&V monthly reports and TIMs 	<ul style="list-style-type: none"> Review IV&V monthly reports and TIMs 	<ul style="list-style-type: none"> Review IV&V monthly reports and TIMs

Key Terms Used:

- Participate: to be a contributing member with defined roles and responsibilities
- Perform: to lead or conduct a prescribed activity
- Assess: to evaluate processes/products and provide assessment results and recommendations
- Review: to extract for informational purposes and use as potential input into SQ activity planning